

MEMORANDUM

February 24, 2020

TO: Government Operations and Fiscal Policy Committee
Public Safety Committee

FROM: Dr. Costis Toregas, Council IT Adviser
Susan Farag, Legislative Analyst

SUBJECT: Capital Improvements Program – Master Lease Digital Evidence Data Storage (P342001)

PURPOSE: To review and recommend action regarding CIP project P342001 on data storage

The following are expected to attend:

Gail Roper, CIO, DTS
Mike Knuppel, CDO/PS Program Director, DTS
Deputy State's Attorney Peter Feeney
IT Director Dave Seeman, State's Attorney's Office
Adam Kisthardt, Director, Information Management and Technology Division, MCPD
Suzy Renauer, Deputy Director, Field Services, Information Management and Technology
Division, MCPD
David Seeman, Director of Technology and Court Support, SAO
Alison Dollar, Lead Fiscal and Policy Analyst, OMB

Staff Recommendation:

1. **Request** that the Committees be provided with an update, including expected technology migrations and funding envelopes for the Strategic Plan that will address long-term storage needs for the entire County government and its agencies no later than Fall 2020.
2. **Endorse** the Executive's recommendation of **\$487,000** for the Digital Evidence Data Storage program in FY21 and recommend its full funding to the Council.

The Executive has requested funds to continue a project in the Capital Improvements Program that will allow for the purchase of expanded digital memory to store the increasing amounts of digital evidence in the Electronic Crime Unit (ECU) within the Montgomery County Police Department (MCPD).

The Executive proposes to:

“...add funding to the Master Lease: Digital Evidence Data Storage project to provide a temporary storage solution the Montgomery County Police Department's Electronic Crimes Unit (ECU), while the County develops a long-term sustainable solution for the acquisition, management, storage and use of digital evidence in criminal investigations and prosecution....” (p10-1 of the CIP proposed budget).

Council staff raised several questions; the answers, along with a general overview that sets the context for the request, and Council staff comment where appropriate, are provided below.

Council Q&A

1. Last year, Council was told the additional data storage is a temporary solution; is there progress in FY20 towards a permanent solution, and what does it look like?

There are multiple issues and storage needs. A permanent solution would involve being able to link all digital evidence files to JustWare using custom software that provided a case view of digital evidence. It would also include suitable network bandwidth. Storage needs are expected to continue to grow based on changes in technology which result in ever larger digital evidence files. Progress has been made toward linking some files thereby eliminating some storage requirements.

a.) **Issue:** Additional storage was needed for JustWare in order to ingest body worn camera video, interview video and in car camera video so that it could be shared through the eDiscovery portal.

Status: Partially Resolved. Additional storage was added to JustWare and implemented. Additional analysis is required to determine the best approach to link files between Evidence.com and JustWare. This will allow video to be available through the eDiscovery portal without having to ingest and store it a second time in JustWare. This link will apply only to body worn camera video, interview room video and in-car video.

b). The Electronic Crimes Unit generates large volumes of data taken from cell phones and laptops as part of case investigations. The volume has continued to grow at faster rates than anticipated due to rapid changes in technology (larger cell phone and computer memories, 8k video, etc.). Some of this data is shared with the SAO via flash drives or shared drives. This data must be ingested into JustWare in order to share it through eDiscovery. This will continue to increase the storage needs of JustWare unless we develop a solution that allows linking of files. Such a solution would need to include front end software to manage the files.

Note: Some of the data generated by ECU is not shared because it is considered contraband (i.e. child pornography). Legally they cannot share this data; legally they must share all other data. Status: Not resolved. The \$487K funding request will allow ECU to store data for new cases for perhaps three more years. It will not assist with any storage needs JustWare will have as a result of this type of data. Nor will this funding facilitate sharing of files more easily.

c). The Electronic Crimes Unit needs increased network bandwidth in order to access and analyze files. Staff spend a significant amount of time waiting for files to be accessed due to them residing at EOB. The servers could be moved to Police HQ but they would still require increased network bandwidth.

Status: Not resolved. The original funding request included \$50k for network analysis and design.

d). The electronic crimes unit has no backup of its data.

Status: No funding has been requested to address this issue. Existing servers could be used as backup of active cases which could be put on newer servers with improved network access. Older cases could be stored in the cloud.

e). Crime scene photos, County CCTV footage used as part of an investigation, private sector CCTV footage and other digital evidence are currently stored in the cloud on the police QTel evidence system.

This system is primarily used for the management of physical evidence stored in evidence rooms. However, digital evidence can be attached to cases. This evidence is then shared with the SAO via shared drives and flash drives. This requires storage in JustWare since there is no linking of files; the volume of this type of evidence is not as great as that contained in Evidence.com or generated by ECU.

Status: The current funding request does not include funds to facilitate linking Qtel and JustWare; therefore, digital evidence will continue to be stored redundantly in JustWare in order to make it accessible to defense counsel through eDiscovery.

2. Are there efforts to develop a comprehensive data retention policy that covers both on-premises, as well as cloud-based storage solutions? What are the parameters for such a policy?

There are retention policies in effect. The SAO follows the retention policies set forth by the State of Maryland Judiciary for District Court and Circuit Courts. The policy would be the same for on-premise and for cloud storage, the policy is based on the case type not so much as where the data resides. The police follow the same policies as the SAO. Cases such as homicide or rape cases require retention periods of 99 years. Note that retention policies for body worn camera and in-car video that never become part of a case are less because the video is NOT part of a criminal case. Once there is a criminal case, different state mandated retention policies for all evidence take effect.

3. What new technology options are being explored for the permanent solution?

As explained above under Question One, the SAO is currently investigating the ability to link files (BWC video) between Evidence.com and the JustWare CMS; this would help reduce the need for future storage for these types of files. The SAO is in contact with the JustWare vendor to investigate their cloud provided services and determine how these services will meet our ongoing business need and at what cost. Members of the DEMD Strategic Working Group attended a presentation by Information Builders to discuss a permanent integrated solution which would allow linking of files and a common case view. Some components of the solution would be based on licensing of various Information Builder tools, some of which are used by the Police Department and IJIS. Conceivably this could replace the eDiscovery portal or the eDiscovery portal could be updated using this type of technology. Additional analysis will be required to develop this concept and a potential business solution. ECU believes that older case files could possibly be stored in the Cloud. However, this would still require the development of some type of software to effectively manage and access the cases.

4. MCPS has a significant data storage challenge from school bus cameras, as do other agencies from video, as well as other data capture devices. What is the position of the ITPCC CIO subcommittee on an enterprise strategy for a potential shared solution to the increasing costs for storing data?

Shared solutions which would leverage buying power to reduce costs are not likely because each type of video is designed for a unique purpose and has unique software to manage it. The software is generally tied into the storage solution. For example, the companies that make school bus cameras do not make body worn video cameras or in-car cameras and vice versa. It would not be cost effective to store all school bus data in evidence.com; it could be possible to store school bus data that becomes part of a criminal case in evidence.com - this would well under 1% of all school bus data generated.



Master Lease: Digital Evidence Data Storage

01/04/20

Category	General Government	Date Last Modified	01/04/20
SubCategory	Technology Services	Administering Agency	Technology Services
Planning Area	Countywide	Status	Planning Stage

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Other	1,237	-	750	487	487	-	-	-	-	-	-
TOTAL EXPENDITURES	1,237	-	750	487	487	-	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Short-Term Lease Financing	1,237	-	750	487	487	-	-	-	-	-	-
TOTAL FUNDING SOURCES	1,237	-	750	487	487	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 21 Request	487	Year First Appropriation	FY20
Appropriation FY 22 Request	-	Last FY's Cost Estimate	750
Cumulative Appropriation	750		
Expenditure / Encumbrances	-		
Unencumbered Balance	750		

PROJECT DESCRIPTION

The volume of digital evidence has grown exponentially in recent years with the implementation of body worn cameras and increased storage capacity of personal devices including cellphones and laptops. To manage the volume of data, the County requires additional storage capacity through the use of network attached storage and additional servers.

ESTIMATED SCHEDULE

Hardware for the State's Attorneys Office will be purchased in FY20. Hardware for Montgomery County Police Department (MCPD) will be purchased in FY21.

COST CHANGE

Cost increase is needed to provide the Electronic Crimes Unit (ECU) within the Montgomery County Police Department (MCPD) additional storage capacity until a long term solution is fully implemented. Funding allows for six A200s (Dell EMS ISILON Scaled Out Network Attached Storage), storage, and warranty.

PROJECT JUSTIFICATION

This investment addresses FY21 data storage requirements as the County develops a long-term solution.

FISCAL NOTE

This project provides appropriation authority for a purchase funded through the Master Lease program. Master Lease payments will be appropriated through the FY21 Operating Budget.

COORDINATION

Department of Technology Services, Department of Finance, State's Attorney's Office, and Montgomery County Police Department.